Columbus Energy Review Committee

Report to Mayor Michael B. Coleman
and
Council President Andrew J. Ginther

July 14, 2014

Background

Mayor Michael B. Coleman and Council President Andrew J. Ginther asked a group of citizens to serve as the Columbus Energy Review Committee. The charge given the group was to explore the issue of aggregation of natural gas and electricity purchases for residents and small businesses of the City of Columbus. Based upon that exploration, the Committee was asked to make a recommendation about whether aggregation offered sufficient potential benefit to citizens for both the Mayor and Council to move forward with establishing such a program in Columbus.

The Columbus Energy Review Committee members are:

- Regina Clemons, Director of Emergency Assistance, IMPACT Community Action Agency
- Aparna Dial, Director, Energy Services and Sustainability, The Ohio State University and chair of the Mayor's Green Team
- Cindy Farson, Director, Central Ohio Area Agency on Aging
- Pastor Tyrone Lawes, New Hope Baptist Church
- Cheryl Roberto, Associate Vice President, Environmental Defense Fund
- Mark R. Shanahan, Principal, New Morning Energy LLC (Committee chair)
- Jim Sweeney, Executive Director, Franklinton Development Authority

Process

The Committee held several hearings to gather information, ask questions, and discuss the issues. All meetings were open to the public, publicly noticed and recorded for re-broadcast on the City's government television channel (CTV-3) and on YouTube. In addition, a web site was developed (columbus.gov/columbusenergyreview); all materials presented to the Committee are available to the general public online. In addition, any questions from the public have been posted along with answers. CTV-3 established a schedule of re-broadcast of all meetings.

The appendices to this report include all materials as well as a CD with videos of each meeting.

The Committee heard from a series of experts in the field who addressed the details of aggregation, the experiences of municipalities that have implemented aggregation and an overview of the regional energy situation as well as the potential for renewable energy and energy efficiency programs. We learned from the Public Utilities Commission of Ohio, Ohio Consumers Counsel, the Columbus Division of Power, the cities of Cincinnati, Cleveland and Upper Arlington, the Mid-Ohio Regional Planning Commission, Ohio Advanced Energy Economy, and the Ohio Environmental Council. There was a conscious decision to not invite potential vendors as speakers to avoid the appearance of conflicts of interest should the initiative move forward.

At its June 6 meeting, Committee members began to formulate possible recommendations. It was the consensus that, in addition to the original charge of a "yes-or-no" choice, it was important to flag various issues that require careful consideration from the Mayor and Council as the process moves forward.

At its June 13 meeting, the Committee reviewed a draft of this report, made final suggestions for changes and adopted it by

consensus. Final refinements of language were reviewed and approved by the committee.

Aggregation

Aggregation is the process through which a group of customers is brought together and uses that combined buying power to negotiate for better prices and benefits in the purchase of energy. In Ohio, aggregation can be used to purchase both electricity and natural gas. Ohio law allows local governments to organize the aggregation; that process is called municipal aggregation. (ORC 4928 and 4929)

It is important to note that aggregation only addresses the generation or supply price for electric and natural gas respectively. It does not address the costs of distribution and transmission. Whatever company is chosen for that supply contract, the existing distribution company remains in place (AEP Ohio or Columbia Gas of Ohio).

The entity that represents the combined customers is known as an aggregator. The Public Utilities Commission of Ohio (PUCO) must certify each aggregator to be sure it is qualified to provide the electricity or natural gas.

In addition, when a local government establishes an aggregation plan, it can choose to aggregate both natural gas and electricity, or either of them alone. The rules about the steps government must take are different depending on whether the municipality is designing an opt-in or opt-out program. The opt-in choice requires that each resident or small business must sign up individually to be enrolled in the program and to receive its benefits. The opt-out choice automatically enrolls all eligible customers and gives them the option to not be included in the program.

Municipal aggregation programs must be established through a formal action of the governing body. In Columbus that body is the City

Council. In the opt-in choice, Council must pass an ordinance, develop a detailed plan including all rates and terms, and hold two public hearings on that plan. It must also submit the plan to the PUCO for certification before any customers are signed up.

If the local government chooses the opt-out plan, there are a number of additional requirements. The aggregation question must first be placed on the ballot and approved by a majority of voters. After approval, the plan must be developed and subject to two public hearings as noted above. Once the detailed plan is adopted, each customer must be notified of the plan and its details and given the option to not participate. As with the first option, the PUCO must certify the plan before customers can be enrolled.

Typically, a local government aggregator goes through a bid process to select a vendor who will be responsible for setting up, implementing and then administering the aggregation program.

In the state statute allowing governmental aggregation, certain groups of customers are deemed to be ineligible to be included in an aggregation plan. These include customers already enrolled in the Percentage of Income Payment Plan (PIPP), customers who have already signed a contract with a supplier through customer choice, customers of a municipal electric company (Columbus Department of Public Utilities, Division of Power), and mercantile customers (commercial or industrial customers using more than 700,000 kilowatt hours annually).

Although the Committee did not undertake a detailed review of eligible customer databases, we believe that approximately 220,000 electric customers and 120,000 natural gas customers will qualify. (It is important to remember those groups excluded by state law, described above.)

Aggregation experience in Ohio

Across Ohio, more than 215 communities have established electric and/or natural gas aggregation programs. The Committee invited three to present: the City of Cincinnati, the City of Cleveland and Upper Arlington. (The detailed presentations are available in the appendices.)

In addition to a general overview, each city was asked to address a number of specific questions. Some of the key issues heard were:

- Cost savings can be significant. For example, Cleveland estimates its aggregation plan will result in a savings of $11 million; the average resident will save $140/year and the average small business will save $479/year. In Cincinnati, its first contract resulted in $10.1 million in annual savings; the average customer saved $154.47/year. It second contract, due to shifts in the market place, is projected to save $2.5 million/year with the average customer saving $38.05.

- A local government is not required to move ahead with aggregation even after it is approved on the ballot; the local government retains full discretion on timing.

- Local governments have usually bid out gas and electric aggregations separately rather than in a combined package. One reason is the capacity of city staff to responsibly craft and oversee plans that include the complexities of gas and electric pricing. A second reason historically has been a perception that natural gas prices are more volatile than electric prices; accordingly, gas aggregation has sometimes been viewed as entailing more risk. Finally, pricing for electricity is typically higher in the summer and gas is higher in the winter; timing the bids during low pricing periods may result in more savings.

- As the electricity market becomes more competitive, savings achieved through aggregation are smaller than they were several years ago but they can still be significant for city residents. (For example, Cincinnati's program was able to offer a 21% savings from the price to compare originally but in a renewal of contracts could only achieve a 7% reduction.)

- Cities frequently view aggregation as a way to go beyond simple price reduction and negotiate contracts that can include green energy requirements, energy efficiency program support and local economic development.

- Both Cincinnati and Cleveland were able to contract for 100% green power through the use of Renewable Energy Credits; Upper Arlington is considering a green option. All still provide savings over the price to compare. (A Renewable Energy Credit (REC) is a certification that 1 megawatt hour of electricity has been generated using a renewable energy source. These RECs are attributes that can be sold separately from the generated electricity.)

- Local governments assume that, over time, energy prices will rise. This leads to a focus on including some level of support for programs that will help city customers achieve higher levels of energy efficiency.

- Local governments struggle with how to encourage local economic development through the aggregation contracts.

- Communities tend to use the "opt-out" structure and find that very few potential customers actually make use of the option.

- State law requires that, in opt-out programs, customers in aggregation must be offered the option again after three years for electricity and after two years for natural gas.

- Local governments enter into contracts of different lengths, ranging from six months to three years.

- The price requested could either be fixed for a certain period of time or variable based on comparison to certain metrics. For example, the PUCO publishes an "apples to apples" comparison of competing gas and electric prices; this establishes the price to compare in each area. Many bids ask for a guarantee of some reduction from that price to compare.

- Although many Cincinnati residents have "smart meters" from their distribution utility, the City has not yet included a requirement in their requests for proposal that the successful provider include pricing options that vary during the day or week. Cincinnati is considering including this in future requests for proposal.

<u>Other possible benefits</u>

In addition to lower prices, many cities are adding additional desired benefits to their aggregation efforts. These include local economic development, renewable energy and energy efficiency. In all cases, there is a general understanding that a successful program requires broad energy education to customers.

Local economic development can be addressed in a number of ways. The first is requiring a local business presence and active community involvement for any successful bidder. A key test of commitment to the community will be the quality of customer service addressing problems, answering questions and resolving customer

concerns. The second is achieving local investment through siting requirements for either renewable energy or energy efficiency programs.

Energy efficiency accomplishes important goals. It serves as protection against rising prices by allowing us to make the best possible use of the energy we do purchase. It saves customers money. Secondly, it conserves natural resources, be they coal or gas, by reducing the amount we need to use to achieve the same benefit. That also reduces carbon emissions. In addition, because energy efficiency programs like weatherization are so local, it creates and sustains local jobs with the potential for increasing worker skill levels.

Perhaps most importantly, the cost associated with energy efficiency is significantly cheaper than the cost of generation. This is particularly true for residential customers as well as small businesses. (A recent Lawrence Berkeley National Laboratories study of efficiency programs across the country documented these savings: Ernest Orlando Lawrence Berkeley National Laboratory. (March 2014) The Program Administrator Cost of Saved Energy for Utility Customer-Funded Energy Efficiency Programs. Billingsley, M.A.; Hoffman, I.M.; Stuart, E.; Schiller, S.R.; Goldman, C.A.; LaCommare, K.) Most customers know they should probably be more efficient. We were taken aback by a presentation from MORPC that identified the amount of energy wasted in the United States. For example, we lose as much as 10% of electricity generated through line losses in transmission and distribution. In addition, many of our buildings (residences and commercial) are older and terribly inefficient. We must do better and must strive for creative solutions ranging from weatherization to distributed generation to advanced demand response. (Demand response refers to customers reducing their consumption of electricity in response to price signals or grid instability. For example, customers could choose to reduce use of electricity on a hot summer afternoon when demand for electricity is at its highest in return for rate savings.)

Renewable energy is clearly a key component in any effort to reduce carbon pollution. Newly proposed USEPA rules for existing fossil fueled power plants have the potential to present economic challenges to a state like Ohio that still generates nearly 70% of its electricity from coal. But those rules also make clear that efficiency and renewable energy are two of the four fundamental building blocks in any compliance strategy. The shift to natural gas as a preferred fuel for electric generation may present challenges in the future to the availability or price of natural gas for home heating. Other cities have achieved 100% renewable electricity through the use of Renewable Energy Credits (RECs). These are instruments through which you can buy electricity generated from renewable sources even though that electricity may not be generated nearby. (For example, much of Cincinnati's portfolio was comprised of Oklahoma wind.) Cities are seeking vendors who can protect cost savings and simultaneously encourage development of local renewable energy generation, for example rooftop solar.

Opt-in or opt-out

Opt-out programs are clearly the more popular for local governments. They are easier and less expensive to start up, yet they still offer all customers the freedom to choose.

The law allows a municipal aggregation program to charge a fee if a customer enrolled in the program wishes to withdraw. The cities we heard from have adopted very liberal withdrawal procedures and do not charge a fee. They have not seen any significant reduction in their customer base.

In their initial implementation of the program, they saw very low opt-out numbers: typically below 10% for residential customers.

On the other hand, opt-in programs are clearly completely voluntary in terms of customer participation. No customers can argue

that they did not understand the option to be removed from the program. However, opt-in programs demand extensive customer outreach, education and follow up. This entails resources in terms of time, funding and personnel. One of the opt-in challenges is that a significantly lower participation rate (compared to opt-out) can result in noticeably lower cost savings.

Recommendation and flagged issues

After careful consideration, the Columbus Energy Review Committee recommends that the Mayor and City Council pursue the potential for both electricity and natural gas 'opt-out' aggregation for the citizens of Columbus. The opt-out option requires that the question be put on the ballot and subjected to a public vote. The Mayor and City Council will need to carefully consider the challenges of such a ballot initiative, the resources required for a successful campaign and the appropriate timing for such an initiative.

We do so with a keen understanding of the complexity of both the issue and the process by which to move forward. We believe that aggregation offers the opportunity to save the citizens of Columbus money on the purchase of energy essential to our quality of life. In addition, we believe that an innovative approach to designing the aggregation plan offers Columbus an excellent opportunity to establish a national reputation as a leader in sustainable provision of electricity and natural gas, including energy efficiency, renewable energy (whether through RECs or distributed rooftop solar), and pricing options that vary during the day or week

But we also understand that our review identified a number of issues that will require more in-depth study if Columbus moves forward. These include:

- Careful crafting of vendor eligibility. PUCO establishes a set of minimum criteria for certifying an aggregator. Columbus should

consider whether other factors should be considered to ensure reliability of service and the highest level of customer service. These could include factors such as corporate credit rating, aggregation experience, vendor location, customer service history, and corporate responsibility record.

- Length of contracts. The balancing act in contract length is between the risk of market volatility and long-term price stability. The City should establish clear performance criteria and have the ability to terminate a contract if performance metrics in quality and price are not maintained.

- Decision points. Assuming the City moves ahead, there is still a long process to secure the right vendor and to achieve the requested program benefits. The City should maintain absolute flexibility on the timing of any bid process, on the details of the bid specifications and on implementation of any plan.

- Citizen involvement. We believe that the complexity of energy choices, including pricing, confuses many people. In order to pass the ballot measure and implement a successful plan, the needs and concerns of many different constituencies must be addressed. We recommend that, if the decision is made to move forward, the Mayor and Council consider the role citizen advisory groups might play in both the ballot campaign and in the design of the plan. We recognize that any process must remain practical and capable of moving the plan forward. We do not think this precludes broad constituency involvement.

We thank Mayor Coleman and Council President Ginther for giving us the opportunity to wrestle with this critical issue. We believe it offers Columbus great opportunities and look forward to any discussions and explorations that may come.